2017

The Facts - Your Choice: STD Risk Information for the Adolescent Patient

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THE FACTS ■ YOUR CHOICE

STD Risk Information for the Adolescent Patient

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Problem Identification (1)

- Since the 1990s, adolescent pregnancy rates have been steadily declining and the reasons are unclear:
  - Delayed / reduced sexual activity?
  - More effective use of birth control?
- Paradoxically, in that same period, sexually-transmitted disease (STD) rates among adolescents have markedly increased:
  - More than half of the 20 million new STDs in the US each year occur among young men and women 15-24 years old
  - 7 out of 10 people will contract a STD within 2 years of becoming sexually active
  - Some reportable STDs are becoming so wide-spread that the CDC is considering ending surveillance of them

Problem Identification (2)

- The reasons for the drastic increase in adolescent STD rates are equally unclear:
  - Conflating a birth control method's efficacy with its efficacy in STD risk reduction?
  - Improper use of the most effective forms of STD prevention?
  - Ubiquitous use of technology leading to normalization of high-risk sexual behavior?
- Whatever the reason, it would appear that current sexual health education paradigms for adolescents have been effective regarding contraception, but manifestly ineffective regarding STD risks and prevention.
  - 2013 data indicates that of sexually-active high schoolers in Vermont, over 62% did not use condoms during sexual intercourse

Public Health Cost and Unique Community Considerations

- US CDC FY17 STD Surveillance Program (non-HIV)
  - $157M budget
  - 13.8% of $1.13B HIV/Hep/TB/STD total budget
- Vermont Department of Health FY17 STD Program (non-HIV)
  - $174,856 budget
  - 100% federal grant funding through CDC
  - Smallest award of 65 CDC grantees
  - Covers STD surveillance, provider direct service costs, and medication purchase
  - 13.5% mandatory distribution to a Title X provider for screening and testing services
- Vermont 2016 population of 624,594 (estimate)
  - 28¢ per Vermonter for STD surveillance and care
- Effective burden of STD prevention education falls on primary care practitioners
  - Interventions MUST be low cost

Community Perspective

- P. Reiss, MD: *Current sex education doesn't give [adolescents] the complete story. It avoids the discussion of real, long-term health risks from STDs. They can handle that information. They need it in order to make safe and healthy decisions.*
- [Withheld], public health official: *For some reason, [adolescents] aren't making the connection that contraception is only contra pregnancy, it's not contra infection.*
- D. Beaudoin, NP: *What I gather from my patients is that social media has made it easier to find and communicate with someone you're interested in and for someone who is interested to find you... and at younger ages. They need honest information about STDs sooner than we'd like to think.*

Goal and Intervention Methodology

- Goal:
  - Provide primary care practitioners with a simple, factual product regarding STD risks that combines elements of pre-visit patient self-education, intra-visit discussion, and post-visit follow-up for their adolescent patients
- Assumptions:
  - The adolescent patient is a rational being who is capable of making sound, healthy choices when presented with factual information
  - The medical practitioner is seen by the adolescent patient as an arbiter of medical fact
  - The adolescent patient considers the medical practitioner an ally for well-being
  - The adolescent patient believes that confidentiality will be maintained
  - Small gestures toward the growing independence and autonomy of the adolescent patient will solidify the patient-provider bond
  - An effective interventional product for adolescent patients can be produced for no more than the current per capita surveillance and treatment budget of 28¢
- Intervention Methodology:
  - 4.25 x 11 inch, double-sided waiting room card printed in-office
  - Simple design includes medically factual, direct text about STD pathology, short and long-term health risks from STDs, means of STD risk reduction, adolescent rights regarding confidential treatment of STDs under current Vermont state law, and integrated provider contact card for follow-up
  - Card given with pre-visit paperwork in waiting area during non-acute visit and likely read during wait
  - Content used as entrée for intra-visit discussion regarding sexual health and STD risk reduction
  - Contact card filled-in and given to the adolescent patient for as a means to forge alliance and for post-visit follow-up

Response

- Interventional product seen by all providers as a viable means to start discussion about STD risk and risk reduction strategies
- No contention about factual content, but disagreement existed among providers regarding the reading level for which the card should be written:
  - 6th Grade for reading simplicity or 8th Grade for fuller explanations
- The necessity of IRB approval precluded quantitative assessment of use

Effectiveness and Limitations

- In-office effectiveness could not be assessed given project timeframe and low volume of adolescent patients, however, the methodology of factual presentation of sexual health risks to adolescents resulting in modified behavior has been shown to be effective (see Guilamo-Ramos *et al*., 2011)
- Actual effectiveness would require a concerted, long-term study to assess change in STD rates in an adolescent population
- Per item cost to produce, including materials and office staff time, was calculated to be 13¢, less than half the state's annual 28¢ per capita STD surveillance budget

Recommendation for Future Intervention

- Although adolescent access to and facility with technology has been associated with increased sexual behavior risk, it is, for better or worse the most effective means of eliciting information from adolescents.
- Pre-visit self-education and screening for intra-visit discussion using a digital app has been proven in a mental health model using the Dartmouth-licensed Healthy Teens Screening Software. It would be interesting to validate the effectiveness of sexual health and STD risk questions using DartScreen or a similar, but open-source app.
- The rapid increase in STD rates among adolescents while pregnancy rates have fallen, and the long-term health consequences that will remain with patients as they age into the adult population, indicate that STD risk and prevention intervention is an area worth continued study.

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INTERVIEW CONSENT FORM

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2017

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work.

The interviewer affirms that he/she has explained the nature and purpose of this project.

The interviewee affirms that he/she has consented to this interview.

Yes: X

No:

Name: P.J. Reiss, MD, FAAFP

Name: D. Beaudoin, RN, MSN, AGNP